### **PREFACE**

#### P.1.1 What Is This Document?

A statewide program environmental impact report/environmental impact statement (EIR/EIS) was certified in November 2005 as the first phase of a tiered environmental review process for the proposed California high-speed train (HST) system planned to provide a safe and reliable mode of travel that links the major metropolitan areas of the state. The California High-Speed Rail Authority (Authority), in cooperation with the Federal Railroad Administration (FRA), prepared a Draft Program EIR/EIS for the San Francisco Bay Area to Central Valley region, circulated it for public and agency review in 2007, and then completed this Final Program EIR/EIS that responds to comments received on the Draft Program EIR/EIS. The Program EIR/EIS considers, describes, and summarizes the environmental impacts—at a programmatic level of analysis—of the proposed HST system within the broad corridor between and including the Altamont Pass and Pacheco Pass. In this document, the Authority and the FRA have identified a preferred HST Network Alternative and general alignments, station locations, mitigation strategies, design practices, and further measures to guide the system's development and avoid and minimize potential adverse environmental impacts.

This Final Program EIR/EIS was prepared to comply with two primary environmental laws: the federal National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The purpose of each of these closely related laws is to help decision makers and the public to understand the potential impacts of a proposed action and ways to avoid those impacts. Should the proposed HST system be advanced in the Bay Area to Central Valley region, subsequent project-level environmental review would consider site-specific environmental impacts.

#### P.1.1 How Do I Use This Document?

The purpose of environmental documents prepared under NEPA and CEQA is to disclose information to decision makers and the public. While the science and analysis that supports this Final Program EIR/EIS is complex, this document is intended for the layperson. Every attempt has been made to limit technical terms and the use of acronyms. Where this cannot be avoided, the terms and acronyms are defined the first time they are used, either in the text or in footnotes. For easy reference, the most frequently used acronyms are provided in a foldout list at the back of this document.

Volume I of this Final Program EIR/EIS is organized into 17 chapters and a Summary. Separate volumes contain appendices (Volume II) and the comments received during the public comment period for the 2007 Draft Program EIR/EIS with responses to these comments (Volume III). For a reader with only a short time to devote to this document, the **Summary** is the place to start. It provides a summary of all of the substantive chapters in this document and includes a table listing the potential environmental impacts at the program level for each topic. If the reader begins here but wants more information, the Summary directs the reader where to get details elsewhere in the document.

Chapter 1.0, Purpose and Need and Objectives, explains why the project is proposed and provides a history of the planning process for the HST project. Chapter 2.0, Alternatives, describes the proposed HST Network and Alignment Alternatives and station location options and the No Project Alternative, contains illustrations and maps, and also discusses alternatives that were previously analyzed but are no longer being considered. These first two chapters help the reader understand what is being analyzed in the remainder of the document.





Chapter 3.0, Affected Environment, Environmental Consequences, and Mitigation Strategies is where the reader can find information about the existing transportation, environmental, and social conditions in the area of the proposed project. This chapter provides the findings of the analysis of potential environmental impacts, along with broad methods to reduce these impacts (called mitigation strategies).

**Chapter 4.0, Costs and Operations,** summarizes the estimated capital and operations and maintenance costs for each HST alignment alternative evaluated in the Program EIR/EIS.

Chapter 5.0, Economic Growth and Related Impacts, presents an analysis of the potential growth-inducing effects and related indirect impacts of the alternatives considered in the Program EIR/EIS.

**Chapter 6.0, HST Station Area Development**, describes the general principles and implementation approaches for HST station area development.

Chapter 7.0, High-Speed Train Network and Alignment Alternatives Comparisons, summarizes and compares the physical and operational characteristics and potential environmental consequences associated with different combinations of alignment alternatives that comprise the HST network alternatives, as well as differences among alignment alternatives and potential station location options.

Chapter 8.0, Preferred HST Alignment Alternatives and Station Location Options, describes the Authority and FRA's preferred HST network and alignment alternatives and station location options. This chapter also describes the evaluation of network alternatives that led to the identification of the preferred alternative.

Chapter 9.0, Unavoidable Adverse Environmental Impacts, describes potentially significant adverse environmental effects, at the program level, that cannot be avoided should the proposed HST network alternative be implemented and any unavoidable adverse impacts of the alternatives. This chapter also describes significant irreversible or irretrievable commitments of resources or foreclosures of future options.

**Chapter 10.0, Public and Agency Involvement**, contains summaries of coordination and outreach activities, both with agencies and the general public. **Chapter 11.0, Organization, Agency, and Business Outreach**, identifies entities conferred with during preparation of the Program EIR/EIS.

The remaining six chapters provide reference material. Chapter 12.0, List of Preparers, provides the names and responsibilities of the authors of the Program EIR/EIS. Chapter 13.0, Final Program EIR/EIS Distribution, identifies those informed of the availability of the Final Program EIR/EIS. Chapter 14.0, Sources Used in Document Preparation, cites the references and contacts used in writing this document. Chapter 15.0, Glossary, provides a definition of terms used in the Program EIR/EIS. Chapter 16.0, Index, is a cross-reference of the major topics used in the Program EIR/EIS. Finally, Chapter 17.0, Acronyms, is a foldout list of the most frequently used acronyms.

In Volume III of the Final Program EIR/EIS, there are copies of all written and oral comments received during the public review period for the 2007 Draft Program EIR/EIS (July 16, 2007 to October 26, 2007). Each comment is assigned a unique comment number. Following each piece of correspondence, whether a letter, comment card, e-mail, website, or transcript of an oral comment, responses are provided for each comment, referenced by comment number. Where appropriate, the response indicates where to find more information on the topic in a standard response and/or the Final Program EIR/EIS.





# P.1.2 What Has Changed Since the Draft Program EIR/EIS?

The following updates, additions, and revisions have been made since the Draft Program EIR/EIS was circulated in late 2007 and have been included in this Final Program EIR/EIS.

Change	Location
Identifies the Pacheco Pass as the Preferred Alternative.	Summary
	Chapter 2
	Chapter 8
Added the following sections to Summary:	Summary
S.4 Areas of Controversy	
S.5 Avoidance and Minimization	
S.6 HST Station Area Development	
S.7 Public and Agency Involvement	
S.8 High-Speed Train Network Alternatives Evaluation	
S.9 Preferred HST Network Alternative	
S.10 HST Alignment Alternatives and Station Location Options for the Preferred Pacheco Pass Network Alternative	
S.11 Least Environmentally Damaging Preferred Alternative (LEDPA)	
S.12 Next Steps in the Environmental Process	
S.13 Altamont Pass Project	
Added or updated information in Table S.8-1, including indirect impacts for floodplains, streams, waterbodies, and wetlands; added fault data; updated airports served and cultural resources and 4(f)/6(f) information.	Summary
Added information on frequency of trains ("For 139 trains over a 14-hour period").	• Summary
Described comments on the alternatives, the evaluation of network alternative	es, • Summary
and the preferred alternative.	Chapter 8
Identified and discussed the early compliance with the Clean Water Act related	d • Summary
to the LEDPA.	Chapter 8
Identified CEQA Environmentally Superior Alternative and NEPA Environmenta	Ily • Summary
Preferable Alternative.	Chapter 8
Added updates to Maintenance and Storage Facilities section (including no Los	S • Chapter 2
Banos facility).	Chapter 8
Updated information on the Regional Rail Plan for the San Francisco Bay Area.	. • Chapter 2
	Section 3.17
Clarified projects included in the No Project Alternative and added an appendix	
of transit projects.	Appendix 2-C-1
Included more discussion on climate change and greenhouse gases.	Section 3.3
	Section 3.17
Included a comparison of air quality impacts between Pacheco Pass and	Section 3.3
Altamont Pass network alternatives.	Appendix 3.3-A
Identified an Authority commitment to acquire easements to protect prime farmland.	Section 3.8
Updated visual simulation along Henry Miller Road.	Section 3.9



Updated Calaveras fault information related to the Altamont Pass alternatives and included new figures (Figures 3.13-4b, 3.13-4c, and 3.13-7) showing faults in the East Bay area, Calaveras Fault Area, and the Calaveras Fault location.	Section 3.13
Identified an Authority commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the Grasslands Ecological Area.	Section 3.15
Included more information related to parks and recreation and added Figure 3.16-1 showing publicly owned lands.	<ul><li>Section 3.15</li><li>Section 3.16</li></ul>
Included additional information related to the Grasslands Ecological Area and other conservation areas and added Figure 3.15-5 showing public lands between San Jose and the Central Valley.	<ul><li>Section 3.15</li><li>Section 3.16</li></ul>
Included a discussion of study areas for each cumulative impact topic and included a list of mitigation strategies for each cumulative impact topic area.	Section 3.17
Revised text related to coupling and uncoupling (split) of trains.	Chapter 4
Updated text to reflect that the Authority will undertake a comprehensive economic study for HST stations in the Central Valley to identify businesses/jobs that would benefit from being located near HST station areas, provide priority to stations where there are adopted transit-oriented development plans and general plans, and emphasize planning for bicycles as well as pedestrian traffic at and around stations	• Chapter 6
Identified that the Authority will utilize its resources, both financial and other, to provide incentives for station area planning and amending county general plans.	Chapter 6
Incorporated information related to public circulation of the Draft Program EIR/EIS.	Chapter 10
Included the Los Banos Bypass Project (SR-152) in the cumulative impact analysis.	Appendix 3.17-A
Included the Staff Recommendation presented at the November 14, 2007	Appendix 8-A
Authority Board Meeting and the U.S. EPA concurrence letter on the LEDPA.	Appendix 8-B
Updated text to reflect change from draft to final.	Summary
	Chapter 1
	Chapter 2
	Chapter 6
	Chapter 8
	Chapter 10
	Chapter 13
Checked use of Transbay Terminal and Transbay Transit Center	All chapters
Revised text, tables, and figures as appropriate to incorporate comments received on the Draft Program EIR/EIS including federal, state, local, individual, public hearing, and website comments.	All chapters





## P.1.3 What Happens Next?

At the completion of this program environmental review process, the Authority expects to be able to certify the Final Program EIR/EIS and make findings for compliance with CEQA, the FRA expects to be able to issue a Record of Decision for compliance with NEPA, and both agencies expect to be able to make various determinations. Assuming a decision is made to go forward with development of the HST system, the Authority and FRA would focus future project analysis in the study region on alignment and station options selected through this program environmental review process. Site-specific location and design alternatives for the alignment and station options selected at the program-level, including impact avoidance and minimization alternatives and strategies, would be further investigated and considered during Tier 2, project-level environmental review.

Preliminary engineering and project-level environmental review would commence in the study region to the extent needed to assess site-specific issues and potential environmental impacts not already addressed in this Final Program EIR/EIS. Project-level environmental review would focus on a portion or portions of the proposed HST system and would provide further analysis of potential impacts and mitigation at an appropriate site-specific level of detail to obtain needed permits and to implement HST projects. Also, after completing this program environmental process, the Authority would begin working with local governments, transportation agencies, and private parties to identify right-of-way preservation needs and protective advance acquisition opportunities consistent with state and federal authority and requirements.



